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Department of Environmental Quality
Division of Environmental Response and Remediation

Michael O. Leavitt Governor Dianne R. Nielson, Ph.D. Executive Director Brad T Johnson Director 168 North 1950 West P.O. Box 144840 Salt Lake City, Utah 84114-4840 (801) 536-4100 (801) 359-8853 Fax (801) 536-4414 T.D.D. www.deq.utah.gov

ERRC-184-03

August 11, 2003

RECEIVED

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DIV OF OIL GAS & MINING

Mr. Jon Cherry, P.E. Kennecott Utah Copper Corporation 8315 West 3595 South P.O. Box 6001 Magna, Utah 84044-6001

RE: <u>KUCC Response to UDEQ Comments on the document entitled Kennecott Utah</u>
<u>Copper Corporation Final Design for Remedial Action at South Facilities</u>
Groundwater, dated May 5, 2003.

Dear Mr. Cherry:

The Utah Department of Environmental Quality (DEQ) and the Department of Natural Resources (DNR) have received and completed a review of the above referenced Kennecott Utah Copper Corporation (KUCC) letter, dated May 5, 2003. At this time, DEQ and DNR are providing an acceptance of the document entitled <u>Kennecott Utah Copper Corporation Final Design for Remedial Action at South Facilities Groundwater</u>, dated December 2002. Please direct your attention to the enclosed comments provided by the reviewing agencies.

The DEQ notes that the Remedial Action Final Design (RAFD) document referenced above will not be revised. However, pursuant to a meeting between KUCC and DEQ the above referenced response letter and the potential follow up correspondence by KUCC to this letter, should be attached to the RAFD prior to its finalization.

The DEQ proposes a conference call (if needed) between the project personnel from the agencies and KUCC to help facilitate the resolution of the outstanding concerns. Please direct

your attention to the enclosure and then contact me at (801) 536-4282 to arrange this conference call.

Say B

Sincerely,

Douglas C. Bacon, Project Manager

Division of Environmental Response and Remediation

DCB/lfh

Enclosure(s)

cc: Dr. Dianne Nielson, Executive Director, Department of Environmental Quality Brad Johnson, Director, Division of Environmental Response and Remediation Fred Nelson, Office of the State of Utah Attorney General Dr. Eva Hoffman, U.S. Environmental Protection Agency, Region VIII Mark D. Wichman, U.S. Army Corps of Engineers Frank Roberts, Division of Drinking Water Jared Manning, Division of Water Rights

Tom Munson, Division of Oil, Gas, and Mining Patti Pavey, M.S., Director, Salt Lake Valley Health Department

DERR Comments on the KUCC Letter entitled KUCC Response to UDEQ Comments on the Document Entitled "Kennecott Utah Copper Corporation Final Design for Remedial Action at South Facilities Groundwater", dated May 5, 2003

Specific Comments:

- 1) Response to Specific Comment #5: Please note that in the annual monitoring report DEQ would appreciate the total mass of sulfate removed from the aquifer to be reported in pounds per acre-foot of water removed per year.
- 2) Response to Specific Comment #9: DERR notes that the current Zone A pilot plant will be retrofitted with the first reverse osmosis skid during Phase I. However, in the diagram referenced in the original comment there were a couple of pipelines that DERR was unsure as to how they would fit into the operations of the retrofitted plant. KUCC's response covers one of these lines, the existing acid well pipeline. Please explain the purpose of the pipeline that is directed from the boxed structure to which the "Existing Acid Well Pipeline" enters just north of the existing membrane filtration building.
- 3) Response to DOGM's General Comment #1: KUCC states in their response to DOGM's comment, "The State is guaranteed by an Irrevocable Letter of Credit that is currently valued at \$45 million and escalates at 7 percent per year until the remediation facilities are constructed and operational." As was pointed out by Mr. Fred Nelson (UAG) and DERR during the meeting on March 12, 2003, the NRD Trust Fund should not be used as a financial assurance for work to be performed. The Trust Fund was established so the Trustee could "restore, replace, or acquire the equivalent of the lost resource for the benefit of the public in the affected area." A rebate of the Trust Fund is based upon the quantity and quality of the water provided by KUCC, as well as the source of the water provided. To use the Trust Fund as a financial assurance measure for the proposed work is not acceptable.

DDW Comments on the KUCC Letter entitled KUCC Response to UDEQ Comments on the Document Entitled "Kennecott Utah Copper Corporation Final Design for Remedial Action at South Facilities Groundwater", dated May 5, 2003

Specific Comment: (comments are directed to KUCC's responses to the U.S. Army Corp of Engineers comments on the RAFD dated March 5, 2003)

- 1) Paragraph 3.3.2: The comment relates to plant reliability, redundancy, and backup power for pumps and controls. The Division of Drinking Water (DDW) is satisfied with the redundancy offered by two trains and with the overall reliability of the technology. The DDW does note a level of backup power is needed so that at a minimum, a controlled shutdown of the plant can occur in the event of an electrical supply failure. At most, an emergency generator would be required to ensure continued plant operation during an extended outage.
- 2) Paragraph 3.3.3: The DDW has been reviewing drawings for the permeate pipeline in a common trench with the feed water pipeline. The DDW previously sent via e-mail (dated June 2, 2003) an approval letter for the water line. The DDW notes that when the normal operating pressure in the water line is less than 20 psi, it is classified as a transmission line requiring more protection from potential contaminants. Please refer to the DDW approval letter entitled <u>Plan Approval Bingham Canyon Water Management</u>, <u>Phase I Feed Pipe to Membrane Water Treatment Plant and Finished Water Line</u>, <u>Kennecott Copperton Concentrator</u>, <u>System #18136</u>, <u>File #06198</u>, for specific requirements of the DDW's approval.

<u>DWR Comments on the KUCC Letter entitled KUCC Response to UDEO Comments on the</u>

<u>Document Entitled "Kennecott Utah Copper Corporation Final Design for Remedial Action at South</u>

Facilities Groundwater", dated May 5, 2003

Specific Comment:

1) The flowchart entitled "Kennecott Utah Copper Water Mitigation Plan" submitted as part of the letter entitled KUCC Response to UDEQ Comments on the document entitled Kennecott Utah Copper Corporation Final Design For Remedial Action at South Facilities Groundwater, dated May 5, 2003 shows Kennecott's proposed method for dealing with quantity and/or quality impacts to third-party water right holders. The chart shows that KUCC, DWR, and/or DWQ will evaluate the impacts to water right holders and review the means of reparation if applicable.

The state engineer is encouraged by the recognition that remediation actions have the potential to affect other water rights. Dealing with those issues quickly and fairly is a critical issue. We are hopeful the process described will encourage mutually acceptable solutions without extensive litigation energy. The state engineer stands prepared to advise and encourage in such solutions. However, all parties should be aware that enforcing such actions lies beyond the state engineer's statutory authority.

DOGM Comments on the KUCC Letter entitled KUCC Response to UDEQ Comments on the Document Entitled "Kennecott Utah Copper Corporation Final Design for Remedial Action at South Facilities Groundwater", dated May 5, 2003

Original General Comment:

1) The identification, final closure, and reclamation of all facilities or impacts associated with this project have not been clearly identified. The organized identification of the hundreds of wells for sampling and removal of the acid and sulfate plumes, the location of the ultimate gypsum repository and the closure of all wells not being used or terminated must be identified so impacts and final deposition associated with these structures can be clearly assessed. This preliminary design plan does not look into the future regarding the ultimate closure nor does it provide real time decisions regarding the ultimate placement and reclamation of these treatment facilities.

KUCC Reply:

The purpose of the final remedial design document was to provide the technical basis and design for the selected remedy outlined in the Record of Decision (ROD). The EPA and State Trustee for Natural Resources are administering this project both of which require financial guarantees. The State is guaranteed by an Irrevocable Letter of Credit that is currently valued at \$45 million and escalates at 7 percent per year until the remediation facilities are constructed and operational. EPA, DOJ and KUCC are currently discussing financial guarantees related to CERCLA remediation issues. In previous correspondence with DOGM, it was indicated that if other agencies were administering the remediation program, including financial guarantees, that DOGM would not require the information or guarantees that are being requested.

DOGM's latest response:

It is understood that DOGM is not requesting financial guarantees for the construction and operation of these facilities in the short term, but is requesting some sort of financial guarantee for the maintenance and long-term operation of these facilities. Our concern stems from the fact that the \$45 million dollars presently held by the Trustee will eventually be totally refundable, once the treatment facilities are built and the required drinking water production levels are achieved.

KUCC has not provided specific information regarding long-term operational, maintenance and closure arrangements or financial guarantees, following the release of the \$45 million LOC. As such, future operational and maintenance problems, etc. could potentially fall on the State's shoulders. DOGM is asking KUCC to demonstrate that some form of long term assurance (financial or otherwise) will be implemented that insures the following: (1) that the pumping and treatment facilities will not fall into disrepair; and (2) once treatment of the contaminated ground water is complete, the infrastructure (support facilities, distribution systems, wells, etc.) that is no longer needed, will be removed and the affected areas restored.

Original General Comment:

a) It is requested that all wells be grouped first by ownership and second by anticipated closure date.

KUCC Reply:

This is not required under the ROD. Secondly, most if not all of the monitoring wells will be used into perpetuity and no closure dates are anticipated.

DOGM's latest response:

Kennecott has not addressed the issue that is very concerning to the Division. Who will assume financial responsibility for the continued monitoring and maintenance of these wells into perpetuity? What mechanisms have been, or will be put in place, to insure that this happens?

Original General Comment:

b) The exact location and reclamation closure requirements for the Gypsum Repository is necessary to assess future reclamation impacts.

KUCC Reply:

See response to General Comment No. 1 above.

DOGM's latest response:

See response to DOGM's General Comment No. 1 above.

Original General Comment:

c) The monetary assurances necessary to carry out maintenance and reclamation of all operation structures with a finite life used to treat or facilitate this operation will need to be identified.

KUCC Reply:

See response to General Comment No. 1 above.

DOGM's latest Response:

See response to DOGM's General Comment No. 1 above.